

2



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,894	08/27/2002	Deepa Ramaswamy	200-1576	7972

22844 7590 04/29/2003

FORD GLOBAL TECHNOLOGIES, LLC.
SUITE 600 - PARKLANE TOWERS EAST
ONE PARKLANE BLVD.
DEARBORN, MI 48126

EXAMINER

MARC COLEMAN, MARTHE Y

ART UNIT PAPER NUMBER

3661

DATE MAILED: 04/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,894

Applicant(s)

RAMASWAMY ET AL.

Examiner

Marthe Y Marc-Coleman

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to application serial No. 10/064,894 filed on August 27, 2002 in which claims 1-18 are presented for examination.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within **the range of 50 to 150 words**. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The abstract does not reflect the method claimed. Also the first sentence of the abstract is incomplete.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3661

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Raffari et al. (U.S. Patent NO. 6,490,511).

In regard to claim 1, Raffari et al. discloses a modular vehicle system controller for use with a hybrid electric vehicle, said controller comprising a plurality of portions, wherein each of said plurality of portions corresponds to a certain vehicle functionality (see Fig. 4).

In regard to claim 2, Raffari et al. discloses that said plurality of portions includes a vehicle mode control portion which is effective to select an operating mode of said vehicle (see Fig. 4 and col. 2 lines 14-28).

In regard to claim 3, Raffari et al. discloses that said plurality of portions further includes an output torque requestor control portion which is effective to

Art Unit: 3661

receive torque commands from a plurality of vehicle subsystems and to determine a total output torque (see Figs. 4 and 5).

In regard to claim 4, Raffari et al. discloses that said hybrid electric vehicle includes a battery pack and wherein said plurality of controls portions further includes a battery management control portion which is effective to control opening and closing of contactors within the battery pack, monitor the battery pack for faults, and process the battery pack power limits (see col. 1 lines 13-20 and Fig. 1).

In regard to claim 5, Raffari et al. discloses that said plurality of control portions further includes a driver information control portion which is effective to receive signals from vehicle sensors and to calculate vehicle operating data which is conveyed to a driver of said vehicle (see Fig. 3).

In regard to claim 6, Raffari et al. discloses that said hybrid electric vehicle includes at least one power source, and wherein said plurality of control portions further includes an energy management control portion which is effective to control the delivery of power to said vehicle by said at least one power source (see Figs. 1-6; and col. 1 lines 39-49).

In regard to claim 7, Raffari et al. discloses that said plurality of control portions further comprises a brake system control portion which controls

Art Unit: 3661

regenerative and engine compression braking functions within said vehicle (see Fig. 4).

In regard to claim 8, Raffari et al. discloses that said plurality of control portions further comprises a torque estimation control portion which estimates an amount of torque produced by said at least one power source (see col. 5 lines 21-33 and col. 7 lines 39-47).

In regard to claim 9, Raffari et al. discloses that said at least one power source comprises an internal combustion engine (see abstract).

In regard to claim 10, Raffari et al. discloses that said plurality of control portions further comprises an engine control portion which controls a process and timing of when to startup and shutdown said internal combustion engine (see col. 2 lines 53-64).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3661

6. Claims 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raffari et al. (U.S. Patent No. 6,490,511) in view of Beckert et al. (U.S. Patent No. 6,202,008).

In regard to claims 11-16, Raffari et al. discloses a method of organizing a vehicle system controller for use with a hybrid electric vehicle, said method comprising the step of portioning said controller into a plurality of control portions, each of said plurality of control portions corresponding to a particular vehicle functionality. Raffari also disclose that said step or portioning said controller into a plurality of control portions wherein each of the control portions corresponding to particular vehicle functionality further comprises the step or logically grouping said plurality of control portions into functional group see Figs. 1-6; and col. 1 lines 39-49).

Raffari et al. fails to specifically discloses that said portions are removable.

Beckert et al. discloses removable modules (see Figs. 1-4 and 9; and col. 2 lines 42-63).

At the time of the invention, it would have been obvious to one skilled in the art incorporate the removable modules of Beckert et al. into the controller system of Raffari et al. because it would provide a more compact desirable system wherein the vehicle owner has the option of adding additional modules to the vehicle controller.

Art Unit: 3661

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marthe Y Marc-Coleman whose telephone number is (703) 305-4970. The examiner can normally be reached on Monday-Thursday from 9:30 AM - 8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A Cuchlinski can be reached on (703) 308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Patent Examiner
Marthe Y. Marc-Coleman
Marthe Marc-Coleman

April 26, 2003